Academician Igor Tamm Lebedev's Institute for Physics Academy of Sciences Moscow B 134, USSR

Dear Professor Tamm:

My wife and I have just returned from a trip to London giving an opportunity to answer your letter of last month, which was received here on April 8th. Being often a fellow sufferer I can very well sympathize with your "agraphia" and will just remark that it is always a pleasure to hear from you.

You and your family must be very fond of skiing to persist after such difficulties. I am afraid the same disease is prevalent here as well, especially since the mountains are only about 200 miles away. I can understand your distress about the incident of your son's mountain climbing but on your account am relieved that it came out well for him.

Concerning your visit to the United States in September, my colleagues and I would be delighted if you could take time to visit Stanford University and perhaps to give a lecture here after the Rochester Conference. We will certainly be able to arrange for the cost of your travel from Rochester to California if that is a difficulty and will try to make any other necessary arrangements. My colleague, Professor Schiff, with whom I believe you are acquainted, should be writing you to confirm this invitation. Let me just say that my wife and I would look forward to seeing you again very much.

Thank you for mentioning the name of Professor lerusalimsky. In fact I have already written to him and hope for some exchange of ideas. In addition some effort is being made through COSPAR to arrange and international discussion of exobiology. Until now, not very much has happened; however, no matter of this sort can be expected to be accomplished overnight and some patience is appropriate. On the other hand, the pace of technological advance is not necessarily modulated by the obstacles to international communication and we obviously do not have an indefinite period of time to anticipate the direct exploration of planetary targets.

You asked about microorganisms in water cooled reactors. I have never seen the reactors in this country; however, I was struck by the observation of numerous blue-green algae in the reactor near Bombay, India. The actual flux to which these organisms are exposed should be measured. In any case, the question you raise is an apt one and I can just reply that it requires investigation. Another source of organisms that may be unusually resistant to radiation may perhaps be found in the agricultural experiments in which high energy sources of gamma

radiation are used in open fields. In the vicinity of the source there should be tremendous selection for bacteria with unusual radioresistance. However, I have not observed any published information on this point.

Yours cordially,

Joshua Lederberg